

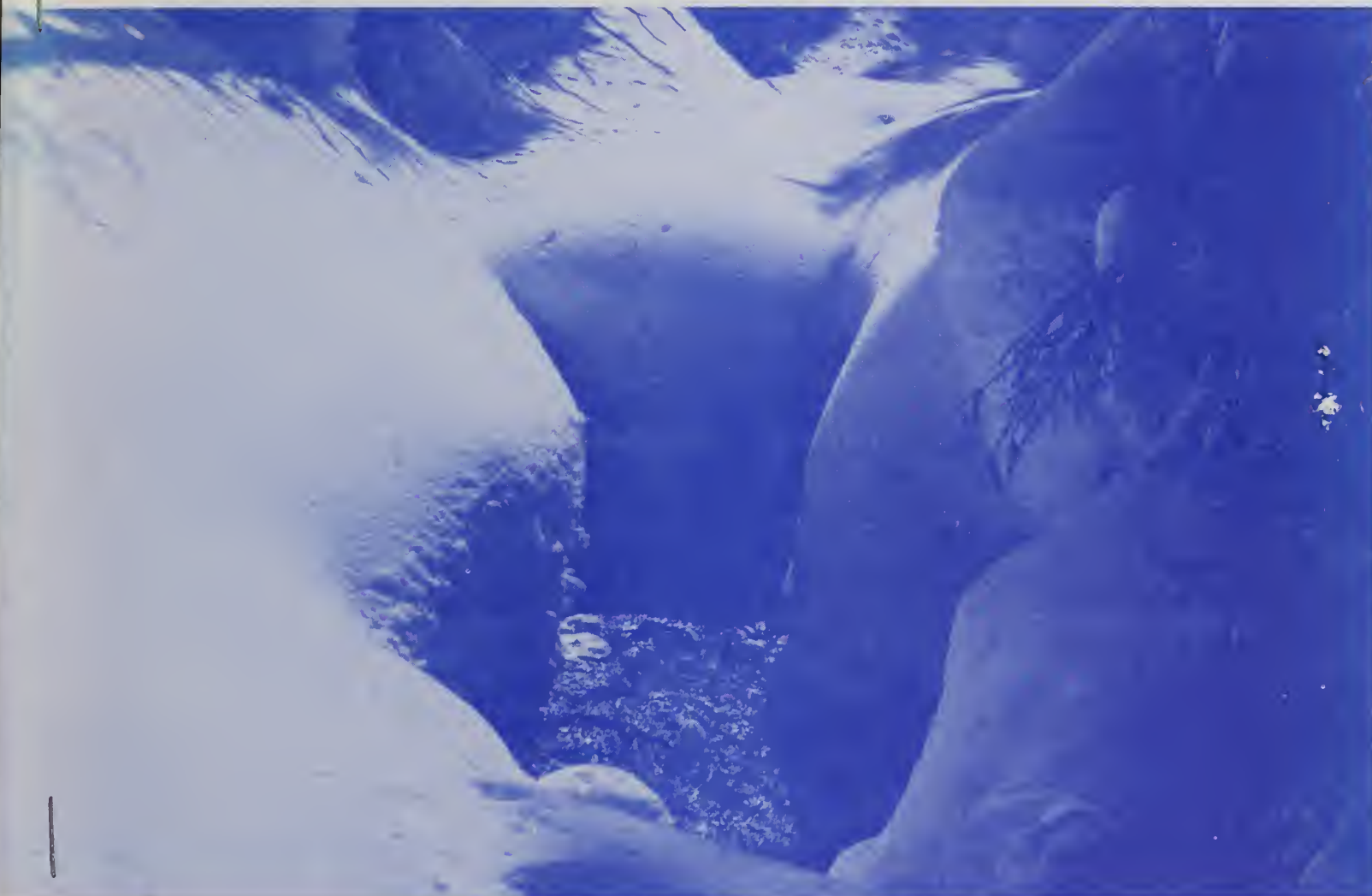
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Water Supply Outlook For Nevada



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

AS OF
April 1, 1984

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefor subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SPRING IS ON THE WAY.

Published by Soil Conservation Service

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland Oregon 97209.

Copies of state and local reports may also be obtained from the state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	2490 W. 26th Avenue, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	32 E. Babcock, Bozeman, Montana 59715
Nevada	P.O. Box 4850, Reno Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	100 E. "B" St., Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 - -- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



Water Supply Outlook For Nevada

**AND
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**



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All Averages are for 1961-1980, 20 Year Period.

WATER SUPPLY OUTLOOK FOR NEVADA

SNOW MEASUREMENTS

April first snowpack conditions affecting Nevada vary greatly throughout the state. The Tahoe, Truckee, Carson, and Walker Basins are all near or slightly below average. The Northern Nevada snowpack is well above average, while southern Nevada snow courses recorded some of the lowest readings on record for this time of year.

Access to range areas in Northern Nevada can be expected to be delayed significantly this year. Above average streamflows will cause accelerated erosion in some areas and may severely damage roads into the back-country. Moisture for range plants in the northern portion of the state will be abundant. However, growth may be delayed by deep snow conditions in many areas.

The below average snowpack conditions in the southern part of the state will adversely affect plant growth and water availability for wildlife species. The lack of adequate moisture will also contribute to dry range conditions and may increase the possibility of wildland fires.

SIERRA EAST SLOPE

The Tahoe-Truckee Basin is 100% of the twenty year average. Most snow course measurements are approximately 50% of last year's record amounts. Run-off is beginning at most of the lower sites and some melting is starting at the higher courses. The snow course percentages in the Tahoe Basin are slightly above those in the Truckee Basin in relation to the twenty year averages.

The combined Carson-Walker Basin is 100% of average. The Walker Basin snow course averages are higher than those in the Carson Basin. The Walker Basin is 106% of average while the Carson Basin is 95%. Snowpack melt has also started at the lower snow courses in both of these basins.

NORTHERN AND EASTERN NEVADA

The snowpack condition in Northern and Eastern Nevada remains well above average. Nineteen snow course records were established for April first.

The Humboldt River drainage is 240% of average. The snowpack percentages in the lower reach of the river are above the averages of the upper reaches. Nine all-time records were established in the Humboldt River Basin. The nine snow courses are American Beauty aerial marker, Dorsey Basin, Draw Creek #2, Green Mountain, Golconda #2, Pole Canyon #2, Robinson Lake aerial marker, Smith Creek, and Lower Trout Creek.

The Snake and Owyhee River Basins are both well above the average for April first with the Snake at 200% and the Owyhee at 269%. Three new records were reported in the Snake Basin while four were recorded in the Owyhee Basin. The snow courses establishing new records in the Snake River Basin are Bear Creek, Goat Creek, and Pole Creek Ranger Station. The Owyhee snow courses eclipsing old records are Columbia Basin aerial marker, Fawn Creek aerial marker, Lower Jack Creek, and Upper Jack Creek.

Snowpack conditions in Eastern Nevada are also very good. The Basin average is 164% and a new record was set at Kalamazoo Creek. Snow course measurements in the Ely area are excellent. Baker Creek #1 has 6.3 inches of water content as compared to a 5.8 inch average. Ward Mountain #2 was measured at 13.2 inches with an average of only 7.7 inches.

SOUTHERN NEVADA

The snowpack in southern Nevada is significantly below the April first average. The basin is only 18% of normal. The Kyle Canyon snow course reported the lowest April first reading ever recorded. Most of the other courses were close to the lowest reading on record for the month.

RESERVOIR STORAGE

Reservoir storage has been adjusted to accomodate expected spring run-off. Total storage as of April first was 976,000 acre feet. The average for the date is 1,010,000 acre feet. The storage in Rye Patch Reservoir has been reduced by 41,300 acre feet since March first and Wild Horse Reservoir storage has been decreased by 7,400 acre feet.

STREAMFLOW FORECASTS

Streamflow forecasts for all segments of the Humboldt River are in excess of 200%. The river at Comus is forecasted at 510,000 acre feet which is approximately 300% of average. The North Fork Humboldt at Devils Gate is estimated at 100,000 acre feet or 290% of average.

The Owyhee River water supply will be 250% of average or better for all forecast points. The forecast near Gold Creek is 63,000 acre feet or 270% of average. The South Fork near White Rock will produce 228,000 acre feet which is 275% of average.

Water supply in the Truckee, Carson, and Walker Basins will be slightly above average for all forecast locations. The Truckee River at Farad, California, should produce an April to July volume of 280,000 acre feet as compared to an average of 269,000 acre feet. The Carson River near Carson City is forecasted at 210,000 acre feet and near Fort Churchill the volume should be 200,000 acre feet. The forecast for the West Walker near Coleville, California, is 175,000 acre feet or 112% of average.

The surface elevation of Pyramid Lake increased 0.9 feet during the month with a total surface rise of 6.43 feet since October 1, 1983. The lake surface is expected to rise another 1 to 2 feet before stabilizing.

The surface elevation of Wahoe Lake continued the downward trend, decreasing .38 feet since last month. Since January 1, 1984 the elevation has dropped .95 feet.

RESERVOIR STORAGE (Thousand Acre Feet) AS OF April 1, 1984

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
Owyhee	Wild Horse	72	50.6	63	35
Lower Humboldt	Rye Patch	194	69.7	167	132
Colorado	Mohave	1,810	1,708.9	1,718	1,700
Colorado	Mead	26,159	23,804.0	24,638	17,200
Tahoe	Tahoe	745	503.9	558	496
Truckee	Boca	41	31.6	28	22
Truckee	Stampede**	222	203.1	203	126*
Truckee	Prosser***	30	9.4	10	9*
Carson	Lahontan	295	218.8	207	242
West Walker	Topaz	59	59.5	32	47
East Walker	Bridgeport	42	41.8	24	36

* Adjusted average.
 ** Storage began August 1, 1969.
 *** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	705	1,172	786
January 1	1,211	1,070	844
February 1	1,041	1,114	920
March 1	992	1,089	968
April 1	976	1,079	1,010
May 1		972	1,032

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.
 TOTAL USABLE CAPACITY 1448

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
E. Fork Carson River nr. Gardnerville, NV	1800-2300	1865
Carson River nr. Carson City, NV	2600-3200	2098
Carson River nr. Ft. Churchill, NV	2150-2750	1914
W. Walker R. below L. Walker nr. Coleville, CA	1830-2330	1589

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
E. Carson River near Gardnerville, NV	200	July 25	July 24
E. Carson River near Gardnerville, NV	500	July 9	July 28

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: April 1, 1984

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1961-80 period

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average †
NORTHERN GREAT BASIN				
Galena Creek near Steamboat, NV	Apr-July	3.9	88	4.4
Little Truckee River above Boca, CA	Apr-July	97	105	92
Truckee River at Farad, CA 1/	Apr-July	280	104	269
Lake Tahoe Rise in ft(assuming gates closed) Apr 1 to high		1.5	118	1.39
Sage Hen Creek, CA	Apr-July	6.9	106	6.5
Steamboat Creek at Steamboat, NV	Apr-July	3.7	72	5.2
Walker Lake Rise	Oct 1 to high	6.9		0.1
Pyramid Lake Rise	Oct 1 to high	8.2		1.1
CARSON RIVER				
E. Carson near Gardnerville, NV	Apr-July	205	110	187
W. Carson at Woodfords, CA	Apr-July	57	108	53
Carson River near Carson City, NV	Apr-July	210	115	182
Carson River near Ft. Churchill, NV	Apr-July	200	120	166
WALKER RIVER				
E. Walker near Bridgeport, CA 2/	Apr-Aug	75	115	66
W. Walker below L. Walker nr Coleville, NV	Apr-July	175	112	148
SNAKE RIVER				
Owyhee River near Owyhee, NV 3/	Apr-July	210	246	85
Owyhee River near Gold Creek, NV 3/	Apr-July	63	269	23
S. Fork Owyhee River near White Rock, NV	Apr-July	228	275	83
Salmon Falls Creek near San Jacinto, NV	Mar-Sept	174	185	94
HUMBOLDT RIVER				
Lamoille Creek near Lamoille, NV	Apr-July	55	192	29
S. Fork Humboldt above Dixie Creek, NV	Apr-July	170	221	75
Marys River near Deeth, NV	Apr-July	80	217	37
N. Fork Humboldt at Devils Gate, NV	Apr-July	100	287	35
Humboldt River at Palisade, NV	Apr-July	650	283	230
Humboldt River at Comus, NV	Apr-July	510	295	173
Kingston Creek near Austin, NV	Apr-July	8.6	260	3.3
L. Humboldt River near Paradise Valley, NV	Apr-July	30	310	9.7
Martin Creek near Paradise, NV	Apr-July	43	269	16
Reese River near Ione, NV	Apr-July	18	270	6.6
Rock Creek near Battle Mountain, NV	Apr-July	45	281	16
NORTHERN GREAT BASIN				
Bidwell Creek near Ft. Bidwell, CA	Apr-July	18	150	12
Mill Creek near Cedarville, CA	Apr-July	6.6	160	4.1
Deep Creek near Cedarville, CA	Apr-July	5	139	3.6
Eagle Creek near Eagleville, CA	Apr-July	6.4	150	4.3
Quinn River near McDermitt, NV	Apr-July	40	250	16
E. Fork Quinn River near McDermitt, NV	Apr-July	33	254	13
McDermitt Creek near McDermitt, NV	Apr-July	30	250	12
EASTERN NEVADA				
Franklin River near Arthur, NV	Apr-July	15.2	258	5.9
Steptoe Creek near Ely, NV	Apr-July	4.4	220	2
COLORADO RIVER				
Virgin River at Littlefield, AZ	Apr-June	58	95	61

NOTE: Streamflow forecasts which appear in this Bulletin are a coordinated activity of the National Weather Service and the Soil Conservation Service.

1/ Observed flow plus change in storage in Boca, Stampede, and Prosser Reservoirs, Donner, Independence, and Martis Creek Lakes, and minus the flow at Truckee.

2/ Observed flow plus change in storage in Bridgeport Reservoir.

3/ Observed flow plus change in storage in Wild Horse Reservoir.

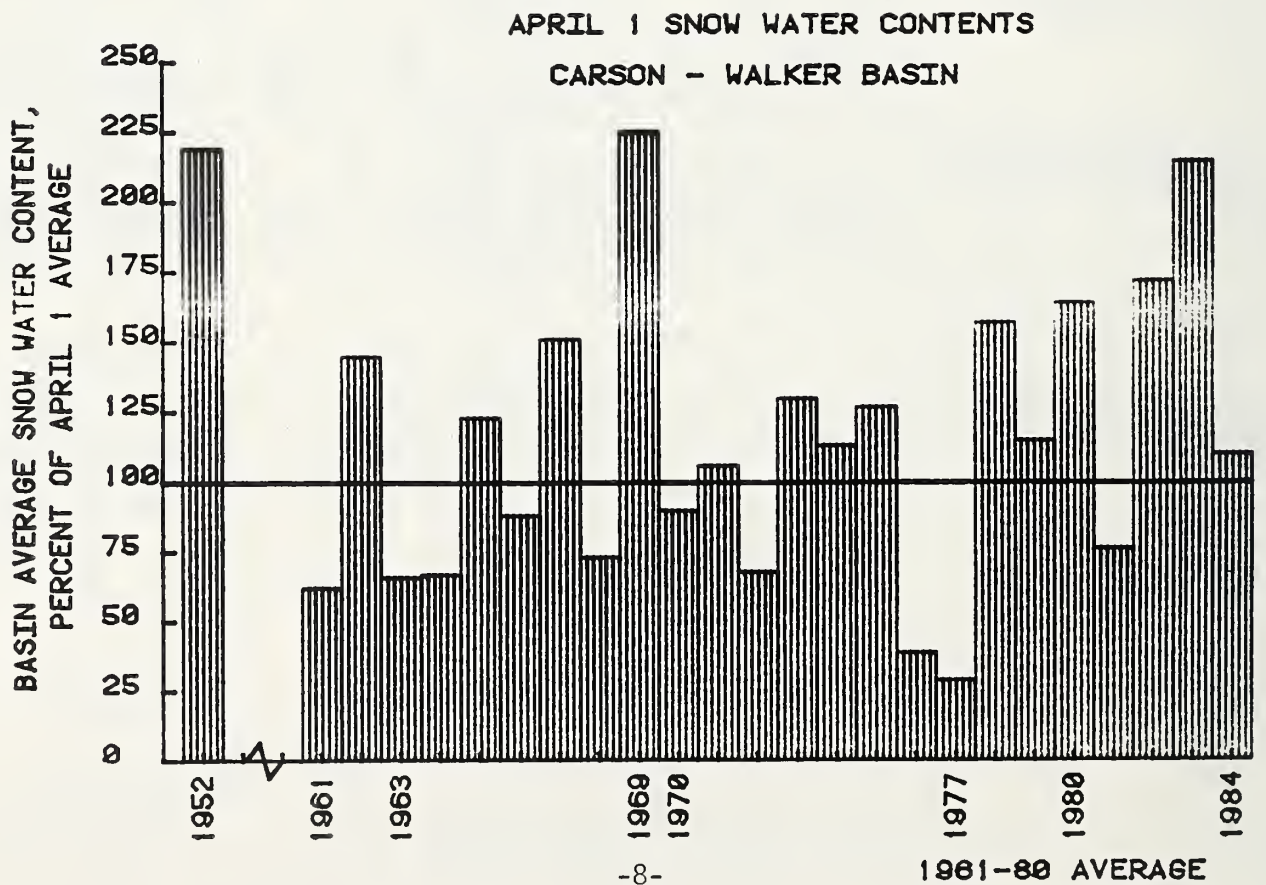
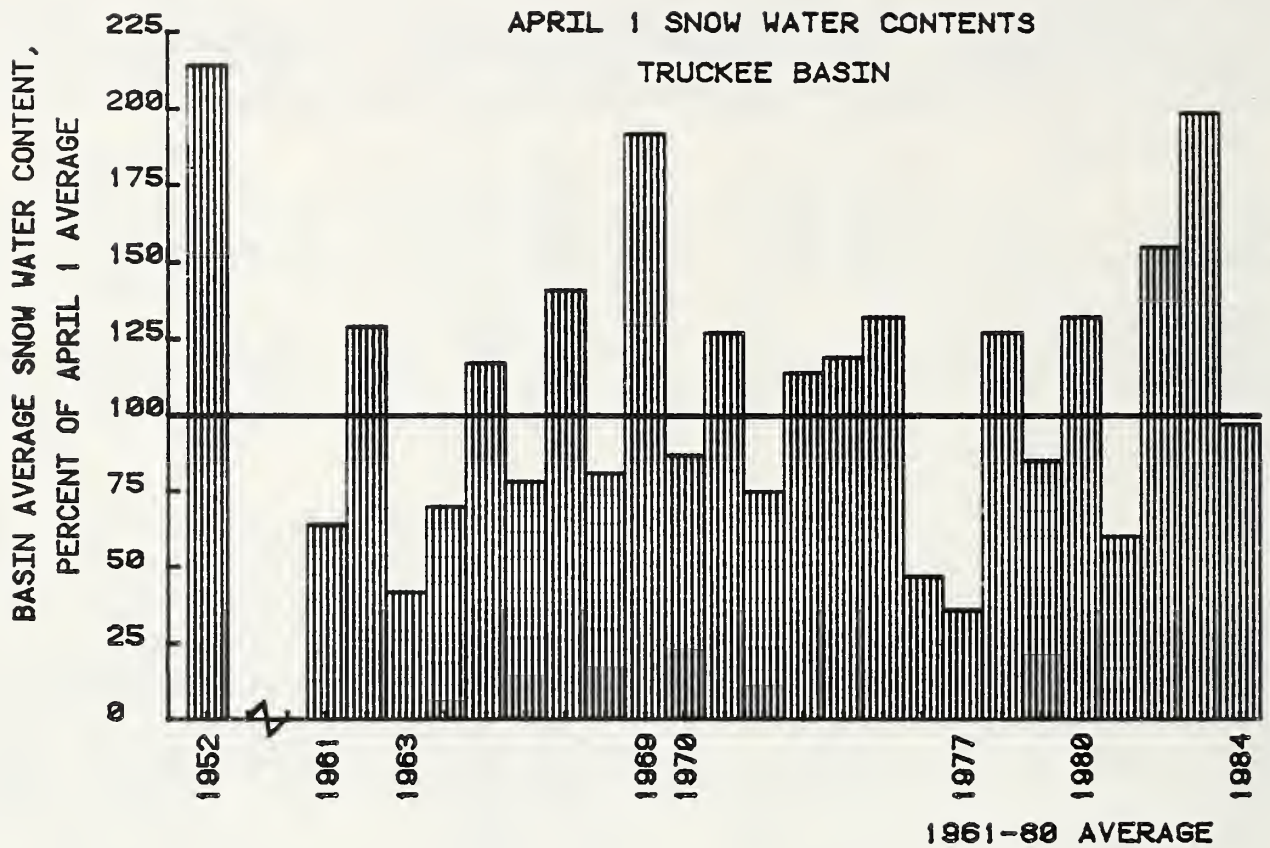
PRECIPITATION (Inches) April 1984

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	April 1 Average
<u>TRUCKEE-TAHOE</u>							
Big Meadows	8,300	4/1/84	2.40	7.8	30.10	44.2	46.40
Echo Peak, CA	7,800	4/1/84	4.30	15.0	71.10	78.1	47.74
Fallen Leaf, CA	6,240	4/1/84	1.10	8.8	17.40	45.0	28.20
Hagan's Meadow, CA	8,000	4/1/84	1.30	7.3	29.00	35.4	25.97
Heavenly Valley, CA	8,800	4/1/84	2.60	8.8	30.80	43.5	28.72
Independence Camp, CA	7,000	4/1/84	2.50	11.1	36.20	45.3	28.41
Independence Creek, CA	6,500	4/1/84	2.80	10.0	37.50	46.7	30.55
Marlette Lake	8,000	4/1/84	2.40	9.9	33.40	46.6	28.27
Mt. Rose	9,000	4/1/84	2.50	15.6	35.70	62.6	26.33
Mt. Rose Ski Area	8,850	4/1/84	4.70	13.6	56.20	79.9	57.96
Rubicon #2, CA	7,500	4/1/84	2.90	8.2	43.00	52.3	41.76
Tahoe City Cross, CA	6,750	4/1/84	2.40	7.7	39.30	46.3	36.71
Truckee #2, CA	6,400	4/1/84	2.30	9.6	33.70	43.8	32.36
Ward Creek #3, CA	6,750	4/1/84	6.70	20.7	76.70	87.8	39.88
<u>CARSON-WALKER</u>							
Blue Lakes, CA	8,000	4/1/84	3.50	7.7	41.10	63.0	47.52
Ebbetts Pass, CA	8,700	4/1/84	3.90	16.0	48.60	74.0	43.51
Leavitt Meadows, CA	7,200	4/1/84	2.10	6.9	31.40	39.9	34.63
Lobdell Lake, CA	9,200	4/1/84	1.80	4.7	21.39	34.3	20.37
Poison Flat, CA	7,900	4/1/84	2.20	7.3	----	43.0	28.49
Sonora Pass Bridge, CA	8,800	4/1/84	3.00	10.5	35.90	51.6	29.36
Spratt Creek, CA	6,080	4/1/84	2.30	7.0	32.30	45.5	32.15
Virginia Lake Ridge, CA	9,200	4/1/84	1.30	5.9	24.50	39.1	10.24
Wet Meadows #2, CA	8,050	4/1/84	3.60	20.5	46.50	72.2	39.88
<u>HUMBOLDT</u>							
Big Creek Summit	8,700	4/1/84	4.40	9.0	25.70	25.7	13.40
Buckskin, Lower	6,700	4/1/84	4.70	6.8	27.30	22.8	18.03
Corral Canyon	8,500	4/1/84	3.70	6.9	28.60	24.6	19.12
Granite Peak	7,800	4/1/84	5.60	7.1	----	29.7	22.55
Green Mountain	8,000	4/1/84	3.30	5.0	36.20	26.2	23.14
Lamance Creek	6,000	4/1/84	5.00	7.0	33.80	27.4	----
Lamoille #3	7,700	4/1/84	4.10	5.9	34.30	22.8	19.49
<u>SNAKE-OWYHEE</u>							
Bear Creek	7,800	4/1/84	4.70	6.6	33.80	25.9	21.38
Big Bend	6,700	4/1/84	1.70	3.5e	17.20	13.1	11.58
Fawn Creek #2	7,000	4/1/84	4.40	6.8	35.20	28.4	16.28
Goat Creek	8,800	4/1/84	5.50	7.7	33.20	28.2	23.57
Jack Creek #2, Upper	7,250	4/1/84	6.70	5.3	27.70	24.3	20.04
Laurel Draw	6,700	4/1/84	3.40	4.6	29.30	20.93	18.86
Pole Creek Ranger Station	8,330	4/1/84	3.10	3.7	20.90	14.2	13.89
Seventy Six Creek	7,100	4/1/84	1.80	3.4	23.20	16.9	14.47
<u>EASTERN NEVADA</u>							
Hole-in-Mountain	7,900	4/1/84	6.50	5.5	40.10	22.8	37.00
Ward Mountain	8,900	4/1/84	3.60	3.5	17.00	21.6	17.55
<u>NORTHERN NEVADA</u>							
Cedar Pass, CA	7,100	4/1/84	5.10	10.0	----	33.2	----
Disaster Peak	6,500	4/1/84	3.60	6.1	26.30	24.1	16.21

All Data SNOTEL Provisional

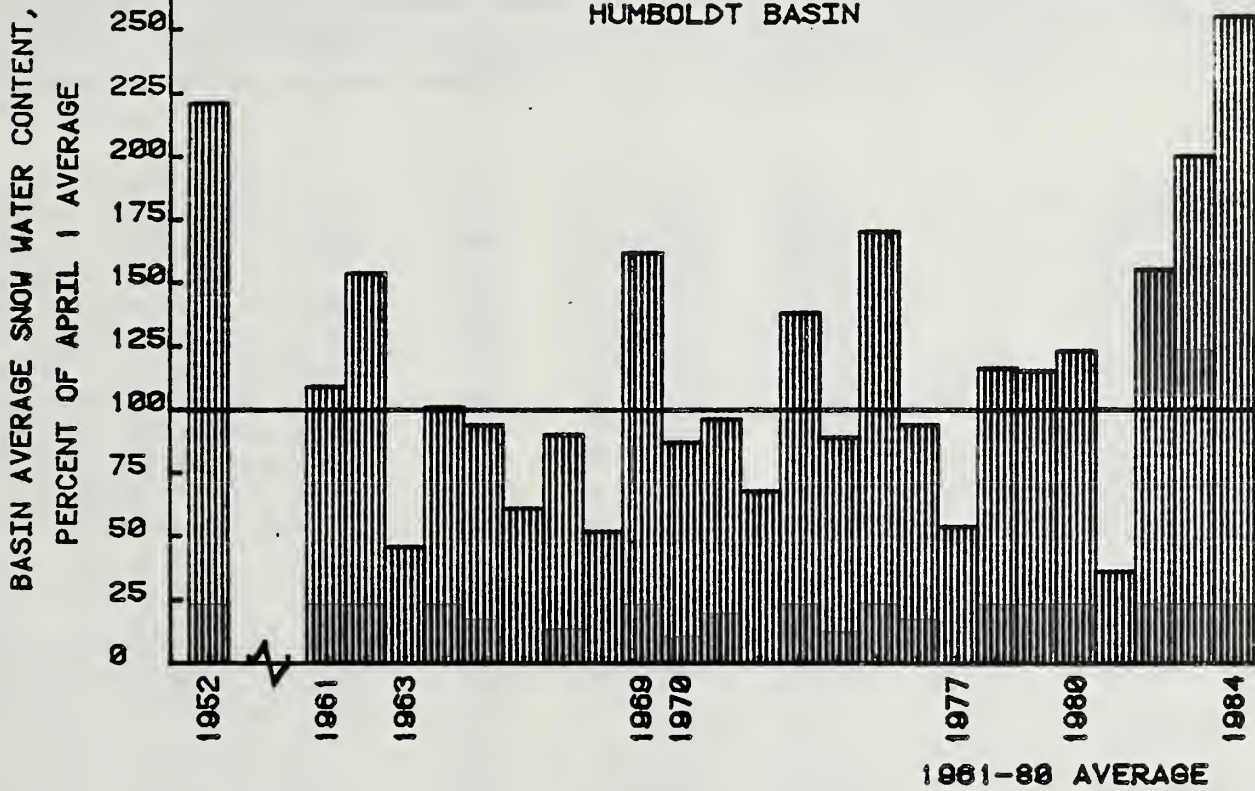
PRECIPITATION (Inches) April 1984, National Weather Service

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Month's Precip.	Last Year	*Normal	This Year	Last Year	*Normal
<u>TRUCKEE-TAHOE</u>							
Boca	5,575	1.51	6.92	2.49	22.47	34.29	17.57
Glenbrook	6,350	1.25	5.23	1.93	16.20	26.64	12.45
Tahoe City	6,230	2.68	8.61	3.92	29.13	42.99	29.13
Truckee Ranger Station	5,995	.71	6.54	4.00	29.40	38.68	27.13
<u>CARSON-WALKER</u>							
Bridgeport Ranger Station	6,560	.43	2.30	.84	5.83	14.23	8.52
Hawthorne	4,215	.17	.45	.30	—	2.66	1.75
Twin Lakes	5,971	4.80	13.34	6.90	45.35	47.91	40.58
<u>HUMBOLDT</u>							
Austin	6,605	1.40	1.99	1.54	10.78	9.88	7.12
Battle Mountain	4,530	.79	.68	.68	3.97	3.96	4.81
Deeth	5,338	1.35	2.18	—	11.02	10.81	—
Elko	5,075	1.25	1.91	.85	10.80	8.73	5.44
Emigrant Pass	5,755	1.73	2.64	1.19	10.74	9.89	6.59
Jiggs	5,760	1.22	2.41	—	13.31	10.06	—
Lovelock FAA	3,900	.11	1.28	—	4.53	5.47	—
Wild Horse Reservoir	6,600	1.13	1.28	—	13.38	*	—
Paradise Valley	4,675	1.78	2.53	.73	12.39	10.32	6.01
Winnemucca	4,301	1.59	1.46	—	8.15	6.74	—
<u>SNAKE-OWYHEE</u>							
Mountain City	5,620	1.01	1.71	.99	10.99	7.33	7.30
<u>EASTERN NEVADA</u>							
Arthur	6,280	1.51	3.09	1.28	17.30	12.50	8.63
Montello	4,880	.35	1.19	.46	4.86	5.20	3.10
Ruby Lake	6,012	2.04	2.60	—	13.93	9.92	—
<u>NORTHERN GREAT BASIN</u>							
Alturas Ranger Station	4,400	1.23	2.86	1.19	10.79	10.26	7.22
Orovada	4,310	1.78	2.22	1.04	9.03	7.33	5.35
Susanville	4,148	.69	2.98	—	—	17.50	10.28
<u>CENTRAL GREAT BASIN</u>							
Tonopah	5,426	.08	2.42	—	—	6.12	1.64
<u>LOWER COLORADO RIVER</u>							
Caliente	4,402	.79	2.94	—	—	7.51	3.89
Las Vegas	2,162	T	.90	—	—	3.03	1.77
Bishop	4,118	.09	.09	—	—	8.53	4.15



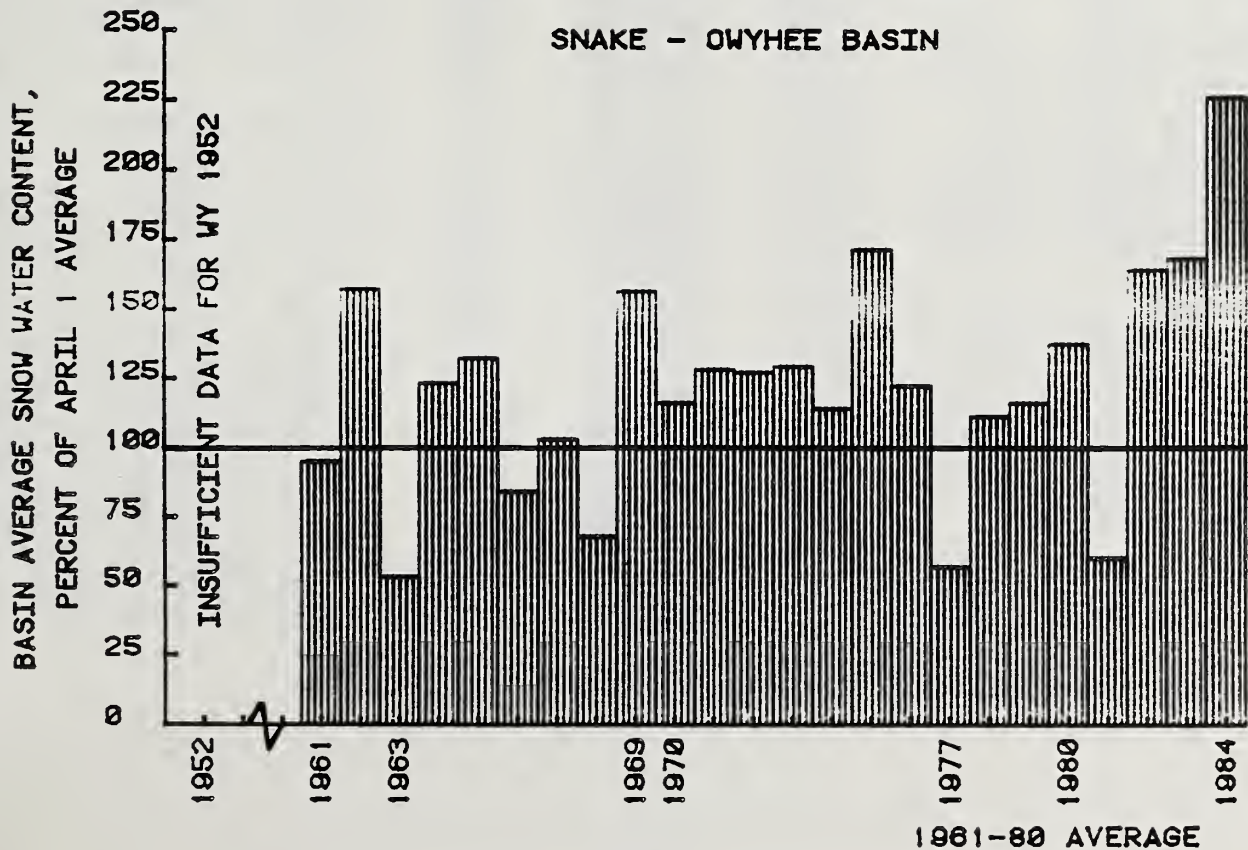
APRIL 1 SNOW WATER CONTENTS

HUMBOLDT BASIN



APRIL 1 SNOW WATER CONTENTS

SNAKE - OWYHEE BASIN



SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content	
NAME	Elevation				Last Year	Average †

LAKE TAHOE

ECHO PEAK (CA)	7800	3/27/84	95	45.3	78.0	36.8
ECHO SUMMIT (CA)	7450	3/30/84	84	38.0	64.0	33.1
FALLEN LEAF (CA)	6300	3/29/84	---	.0	19.5	2.9
FREEL BENCH (CA)	7300	3/27/84	13	6.0	25.6	10.9
GLENBROOK #2	6900	4/02/84	26	9.2	26.2	11.6
HAGANS MEADOW (CA)	8000	3/27/84	42	14.5	39.0	17.5
HEAVENLY VALLEY (CA)	8850	3/30/84	69	28.2	45.5	27.8
LAKE LUCILLE (CA)	8200	3/30/84	165	75.9	****	57.3
MARLETTE LAKE	8000	3/27/84	60	24.6	47.3	22.1
RICHARDSONS #2 (CA)	6500	3/31/84	29	10.4	34.5	15.8
RUBICON #1 (CA)	8100	3/30/84	144	58.9	95.0	48.6
RUBICON #2 (CA)	7500	3/30/84	74	32.0	58.3	29.4
TAHOE CITY CROSS (CA)	6750	3/30/84	32	13.8	41.3	19.5
TRUCKEE, UPPER (CA)	6400	3/27/84	7	3.2	19.4	8.5
WARD CREEK #2 (CA)	7000	3/27/84	95	40.9	76.4	41.6
WARD CREEK #3 (CA)	6750	3/27/84	85	34.5	72.3	38.2

TRUCKEE RIVER

BIG MEADOWS (CA)	8300	3/27/84	58	23.0	42.5	--
BOCA #2 (CA)	5900	3/25/84	---	.0	10.5	3.8
BROCKWAY SUMMIT (CA)	7100	3/31/84	30	13.7	45.2	16.2
CASTLE CREEK (CA)	7400	3/27/84	129	59.8	****	50.2
CSS LAB (CA)	6900	4/01/84	83	33.8	--	--
DONNER PARK #2 (CA)	6000	3/23/84	19	6.8	27.9	16.8
DONNER SUMMIT (CA)	6900	3/27/84	79	27.3	87.2	37.8
FORDYCE LAKE (CA)	6500	3/27/84	73	37.2	85.4	40.6
FURNACE FLAT (CA)	6700	3/27/84	97	48.2	97.4	47.6
INDEPENDENCE CAMP CA	7000	3/27/84	47	18.4	45.0	22.4
INDEPENDENCE CREEK	6500	4/03/84	27	10.5E	32.0	12.9
INDEPENDENCE LAKE CA	8450	3/27/84	120	51.3	72.2	41.6
LITTLE VALLEY	6300	4/02/84	6	2.0	16.1	7.0
MT. ROSE	9000	3/27/84	82	32.2E	57.0	35.9
MT. ROSE SKI AREA	9000	4/02/84	113	49.1	75.6	42.0
SAGEHEN CREEK (CA)	6500	4/03/84	16	6.4E	33.1	17.6
SQUAW VALLEY #2 (CA)	7500	3/27/84	135	59.6	95.0	48.2
SQUAW VALLEY G.C., CA	8200	4/03/84	149	65.8E	****	53.2
TRUCKEE #2 (CA)	6400	3/31/84	21	8.0	29.4	14.5
WEBBER LAKE (CA)	7000	3/28/84	79	34.6	63.8	30.2
WEBBER PEAK (CA)	8000	3/28/84	121	51.0	80.6	42.6

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content	
NAME	Elevation				Last Year	Average +
CARSON RIVER						
BLUE LAKES (CA)	8000	3/29/84	92	38.0	68.0	35.6
ECHO PEAK (CA)	7800	3/27/84	95	45.3	78.0	36.8
CARSON PASS, UP (CA)	8600	3/26/84	76	35.5	65.5	34.3
CLEAR CREEK	7300	4/02/84	20	6.6	22.1	12.0
EBBETTS PASS #2 (CA)	8700	3/27/84	93	41.5	71.0	38.3
FISH VALLEY,UP AM,CA	8050	3/27/84	12	5.4	25.2	14.3
MONITOR PASS AM(CA)	8350	3/27/84	45	18.9	25.2	--
POISON FLAT #2 (CA)	7900	3/27/84	29	13.0	34.1	18.5
SPRATT CREEK (CA)	6080	3/27/84	---	.0	10.5	--
WET MEADOWS LAKE AM	8050	3/27/84	70	31.5	58.5	--
WET MEADOWS #2 (CA)	8100	3/27/84	96	43.0	81.5	39.3
WOLF CREEK AM (CA)	8000	3/27/84	60	27.0	63.0	29.5

WALKER RIVER

CENTER MOUNTAIN (CA)	9400	3/27/84	98	42.0	72.7	37.1
LEAVITT LAKE (CA)	9400	3/27/84	125	58.4	94.2	45.9
LEAVITT MEADOWS (CA)	7200	3/27/84	---	.0	22.4	8.2
LOBDELL LAKE (CA)	9200	3/27/84	44	15.7	35.1	17.2
SAWMILL RIDGE (CA)	8750	3/27/84	45	16.8	37.2	19.6
SONORA PASS (CA)	8800	3/27/84	60	26.9	51.6	24.9
SONORA PASS BRIDGE	8800	3/27/84	69	27.5	46.8	25.3
TIOGA PASS (CA)	9900	3/27/84	81	36.9	62.7	26.7
VIRGINIA LAKES (CA)	9500	3/27/84	39	15.1	33.1	17.7
VIRGINIA LAKES RIDGE	9200	3/27/84	51	19.5	43.7	18.7
WILLOW FLAT (CA)	8250	3/27/84	21	9.2	25.0	10.8

NORTHERN GREAT BASIN

BALD MOUNTAIN AM	6720	3/27/84	17	7.1	8.6	2.3
BARBER CREEK (CA)	6500	3/28/84	40	17.2	22.8	11.4
CEDAR PASS (CA)	7100	3/26/84	53	21.1	--	16.3
DENIO CREEK AM (OR)	6000	3/27/84	---	.2E	--	.3
DISASTER PEAK	6500	4/01/84	58	25.2S	21.2	14.7
DISMAL SWAMP #2 (CA)	7000	3/29/84	98	42.0	42.0	27.0
FORTY-NINE MOUNTAIN	6000	3/30/84	11	4.3	9.4	--
GOVERNMENT CORRALS	7450	3/27/84	66	26.0	--	--
LITTLE BALLY MTN. AM	6000	3/27/84	9	3.6	--	2.0
MT. BIDWELL (CA)	7240	3/29/84	85	34.2	37.6	24.7
OREGON CANYON AM (OR)	7240	3/30/84	27	8.9	11.4	3.6
PUEBLO SUMMIT (OR)	6300	3/27/84	---	.5E	--	--
QUINN RIDGE AM (OR)	6300	3/30/84	15	5.0	.1	.9
RESERVATION CREEK	5900	3/30/84	41	18.5	--	10.5
TROUT CREEK AM (OR)	7800	3/30/84	66	21.1	23.9	7.3

SNOW COURSE MEASUREMENTS

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NAME	Elevation				Last Year	Average +

SNAKE RIVER

BEAR CREEK	7800	3/30/84	94	33.8	27.8	21.3
FOX CREEK	6800	3/30/84	51	17.5	13.1	9.5
GOAT CREEK	8800	3/30/84	89	31.1	22.0	18.4
HUMMINGBIRD SPRINGS	8950	3/30/84	102	36.0	28.5	23.7
JAKES CREEK AM	7000	4/03/84	60	22.2	16.0	--
MERRIT MOUNTAIN AM	7000	4/03/84	42	14.3	5.8	5.4
POLE CREEK R.S.	8330	3/30/84	91	33.2	23.6	21.7
SEVENTYSIX CREEK	7100	3/27/84	58	22.6	17.4	11.4
STAG MOUNTAIN AM	7700	4/03/84	78	28.1	12.6	4.8

OWYHEE RIVER

BIG BEND	6700	3/27/84	47	15.5	13.7	10.6
COLUMBIA BASIN AM	6650	4/03/84	60	21.0	11.2	6.9
FAWN CREEK AM	7050	3/27/84	76	28.1	23.8	11.4
FAWN CREEK #2	7050	4/01/84	92	34.1	26.1	18.0
GOLD CREEK	6600	3/27/84	32	11.1	7.7	4.8
JACK CREEK, LOWER	6800	3/27/84	42	16.1	7.0	2.3
JACK CREEK, UPPER	7250	3/27/84	67	24.7	15.4	9.4
JACK CREEK #2, UPPER	7280	3/27/84	92	34.5	31.2	18.5
JACKS PEAK	8420	4/01/84	146	54.0E	36.4	24.4
LAUREL DRAW	6700	3/27/84	56	19.6	13.7	6.8
LOUSE CANYON AM (OR)	6440	3/30/84	54	20.0	11.0	2.6
TAYLOR CANYON	6200	3/27/84	27	10.3	10.4	2.7

UPPER HUMBOLDT RIVER

AMERICAN BEAUTY AM	7800	4/02/84	75	27.0	13.9	8.4
CORRAL CANYON	8500	3/28/84	83	29.3	25.6	17.5
DORSEY BASIN	8100	3/28/84	82	31.9	23.7	12.3
DRAW CREEK #2	7450	3/27/84	56	20.8	--	--
DRY CREEK	6500	3/28/84	41	16.1	9.6	1.3
FRY CANYON	6700	3/27/84	44	15.1	13.4	6.1
GREEN MOUNTAIN	8000	3/28/84	82	30.7	24.4	11.6
HARRISON PASS #1	6600	3/28/84	29	10.0	6.5	2.0
HARRISON PASS #2	7400	3/28/84	41	14.4	10.6	4.0
LAMOILLE #1	7100	3/28/84	56	18.3	15.6	7.8
LAMOILLE #3	7700	3/28/84	65	22.6	15.6	12.2
LAMOILLE #5	8700	3/28/84	106	42.8	34.6	26.9
POLE CANYON #2	7700	3/28/84	99	40.9	26.6	--
ROBINSON LAKE AM	9200	3/27/84	120	47.4	36.7	27.5
RODEO FLAT	6800	3/27/84	49	17.7	14.3	4.9

SNOW COURSE MEASUREMENTS

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DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content	
NAME	Elevation				Last Year	Average +
UPPER HUMBOLDT RIVER (Cont.)						
RYAN RANCH	5800	3/28/84	8	2.5	.4	.1
SMITH CREEK	7700	3/28/84	78	28.2	21.8	--
TENT MTN, LOWER AM	7000	4/03/84	55	19.3	10.9	15.5
TENT MTN, UPPER AM	8350	4/03/84	86	34.4	25.5	20.5
TREMEWAN RANCH	5700	3/27/84	10	3.3	.0	.3
TROUT CREEK, LOWER	6900	3/28/84	33	11.5	6.6	2.5
LOWER HUMBOLDT RIVER						
BIG CREEK CAMPGROUND	6600	4/02/84	12	4.4	1.2	1.1
BIG CREEK MINE	7600	4/02/84	44	13.0	10.7	4.1
BIG CREEK SUMMIT	8700	4/02/84	73	21.7E	27.1	12.0
BIG CREEK, UPPER	7800	4/02/84	49	17.0	12.1	6.3
BUCKSKIN, LOWER	6700	4/01/84	68	24.7E	18.0	7.0
BUCKSKIN, UPPER	8200	4/01/84	---	31.1E	20.4	8.8
GOLCONDA #2	6000	3/30/84	40	15.7	14.5	2.3
GRANITE PEAK	7800	4/01/84	82	32.7E	37.0	15.1
LAMANCE CREEK	6000	4/01/84	78	31.1E	27.2	6.4
MARTIN CREEK	6700	4/03/84	46	17.0E	23.2	8.1
MIDAS	7200	4/03/84	20	7.4	11.4	1.8
SNOWSTORM MOUNTAIN	7420	4/03/84	68	25.2	24.1	--
TOE JAM AM	7700	4/03/84	66	25.1	15.8	8.3
EASTERN NEVADA						
BAKER CREEK #1	7950	3/28/84	26	6.3	8.7	5.8
BAKER CREEK #2	8950	3/28/84	56	16.5	20.4	12.8
BAKER CREEK #3 AM	9250	3/27/84	65	17.3	27.7	15.5
BERRY CREEK	9100	3/28/84	71	22.7	23.9	14.2
BIRD CREEK	7500	3/27/84	19	5.3	7.7	2.1
DEFIANCE MINES AM	9400	3/27/84	82	24.0	29.2	16.6
HOLE-IN-MOUNTAIN	7900	3/28/84	108	46.7	33.1	21.1
KALAMAZOO CREEK	7400	3/30/84	51	15.2*	15.4	6.1
MURRAY SUMMIT	7250	3/27/84	7	1.3	7.4	1.3
ROBINSON SUMMIT	7600	3/27/84	7	.9	2.0	1.0
SILVER CREEK #2	8000	3/27/84	31	9.5	6.8	5.1
WARD MOUNTAIN #2	9200	3/27/84	43	13.2	27.4	7.7
LOWER COLORADO RIVER						
CORDUROY FLAT	8720	3/27/84	28	9.0	16.0	--
KYLE CANYON	8200	3/26/84	---	.0	23.4	7.6
LEE CANYON #2	9000	3/26/84	10	2.6	23.4	7.7
LEE CANYON #3	8500	3/26/84	---	.0	20.6	6.3
RAINBOW CANYON #2	8100	3/26/84	6	2.2	31.0	13.4
WHITE RIVER #1	7400	3/27/84	6	1.9	10.6	1.8

E = Estimated

S = Snotel Provisional/depth estimated.

NOTE:

All averages based on 1961-80 Period

SNOW MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content	
NAME	Elevation				Last Year	Average +

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TAHOE-TRUCKEE BASIN

Alder Creek	6,960	3/27/84	97	49.4	62.5	----
Apollo Way	7,300	3/27/84	0	0	45.5	----
Bennett Flat	6,200	3/27/84	12	5.7	31.8	----
Brockway Summit	7,200	3/27/84	49	20.1	49.4	----
Cabin Creek	6,540	3/27/84	11	5.6	28.6	----
Clear Creek	5,800	3/28/84	0	0	0	----
Cliff Ranch, Franktown	5,250	3/28/84	0	0	0	----
Davis Creek	5,160	3/28/84	0	0	0	----
Evergreen Hills Road	5,700	3/27/83	0	0	0	----
Fuller Lake	6,200	3/28/84	0	0		----
Galena Creek	7,440	3/27/84	46	20.0		----
Hennes Past Jct.	6,410	3/27/84	30	12.4	30.7	----
Hobart Mills	5,850	3/27/84	0	0	16.6	----
Incline Creek	6,235	3/27/84	0	0	10.6	----
Jones Creek	6,000	3/27/84	0	0	3.2	----
Joy Lake	6,000	3/28/84	0	0	0	----
Jct. 395 & NV 27	4,590	3/27/84	0	0	0	----
Lancer	5,110	3/27/84	0	0	0	----
Little Valley	6,540	3/28/84	0	0		----
Mount Rose Resort	8,280	3/27/84	80	37.6	66.4	----
North Star Fire Dept.	6,320	3/27/84	0	0	15.7	----
RNR Forestry Site	6,400	3/27/84	0	0	19.1	----
Reindeer Lodge	7,060	3/27/84	0	0	32.3	----
Sagehen Creek	6,340	3/27/84	5	2.5		----
Sky Tavern	7,620	3/27/84	39	18.7	41.7	----
Spooner Summit	7,260	3/28/84	28	12.4	32.7	----
Squaw Valley Fire Dept.	6,240	3/27/84	0	0	43.1	----
Tahoe City	6,240	3/27/84	0	0	32.1	----
Tahoe Meadows	8,540	3/27/84	102	50.1	80.0	----
Tamarack Lake	8,820	3/27/84	80	37.4		----
Third Creek	8,000	3/27/84	52	23.0	57.9	----
Thunder Cliff	6,200	3/27/84	0	0	34.1	----
Truckee-Tahoe Airport	5,900	3/27/84	0	0	9.4	----
Whites Creek	5,670	3/27/84	0	0	0	----

AGENCIES COOPERATING IN COLLECTING DATA CONTAINED IN THIS BULLETIN

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U.S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
 Division of Water Resources
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PRIVATE

Amalgamated Sugar Company
Kennecott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee - Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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